

Anxiety Disorder Treatment Using Neurontin (gabapentin), Topamax (topiramate), Gabitril (tiagabine), and Keppra (levetiracetam)

To locate information, I searched Medline using each individual medication name and the following words: anxiety, generalized anxiety disorder, panic disorder, agoraphobia, obsessive compulsive disorder, social anxiety disorder, post-traumatic stress disorder, and acute stress disorder.

Then, today, I got my hands (thanks to Dick Miyoshi) on the following recent review article: Van Ameringen et al. Antiepileptic drugs in the treatment of anxiety disorder: role in therapy. *Drugs* 2004;64(19):2199-2220. This article pretty much does all that I was asked to do (and added some references to my search). I have attached the article. Note especially the table of all the evidence.

I would recommend we follow Van Ameringen's recommendation: "Given the very preliminary data on the efficacy of antiepileptic drugs in anxiety disorders, their current clinical use should be reserved for treatment refractory individuals, as augmentation strategies for partial responders and alternative treatment for those individuals who cannot tolerate first-line treatments such as the SSRIs. There is currently no evidence to support the use of antiepileptic drugs as first-line treatments."

Gabapentin:

Generalized anxiety disorder

*Pollack MH et al. Gabapentin as a potential treatment for anxiety disorder (letter). *Am J Psychiatry* 1998;155(7):992-3. Two case reports using gabapentin for augmentation.

Panic disorder

*Pande AC et al. Placebo-controlled study of gabapentin treatment of panic disorder. *J Clin Psychopharmacol.* 2000 Aug;20(4):467-71. Double-blind, placebo-controlled study, 103 patients. Some response for the more severely ill.

Social anxiety disorder

*Pande AC et al. Treatment of social phobia with gabapentin: a placebo-controlled study. *J Clin Psychopharmacol.* 1999 Aug;19(4):341-8. Double-blind, placebo-controlled study, 69 patients.

*Kaufman, KR. Monotherapy treatment of paruresis with gabapentin. *Int Clin Psychopharmacol.* 2005 Jan;(1):53-5. Single case report.

Posttraumatic stress disorder

*Hamner MB et al. Gabapentin in PTSD: a retrospective, clinical series of adjunctive therapy. *Ann Clin Psychiatry*. 2001 Sep;13(3):141-6. Retrospective chart review of 30 patients.

*Brannon N et al. Gabapentin treatment for posttraumatic stress disorder (letter). *Can J Psychiatry* 2000;45:84. Case reports.

*Malek-Ahmadi P. Gabapentin and posttraumatic stress disorder. *Ann Pharmacother*. 2003 May;37(5):664-6. Single case report, gabapentin added to venlafaxine.

Obsessive compulsive disorder

*Cora-Locatelli G et al. Gabapentin augmentation for fluoxetine-treated patients with obsessive-compulsive disorder (letter). *J Clin Psychiatry* 1998;59(9):480-1. Open-label, six patients.

Topiramate:

Social anxiety disorder

Van Ameringen MA, et al. An open trial of topiramate in the treatment of generalized social phobia. *J Clin Psychiatry* 2004;65:1674-1678. Open label, 23 patients. See study analysis on MAA form. Type III

Posttraumatic stress disorder

Berlant, JL. Prospective open-label study of add-on and monotherapy topiramate in civilians with chronic nonhallucinatory posttraumatic stress disorder. *BMC Psychiatry*. 2004 Aug 18;4(1):24. See study analysis on MAA form. (Note potential bias). Type III

(Berlant has two other publications in this area but I believe the studies are on the same patients.)

Obsessive compulsive disorder

Van Ameringen M et al. Adjunctive topiramate in treatment resistant obsessive compulsive disorder (poster). 157th Annual Meeting of the American Psychiatric Association; 2004 May 1-6; New York. Sixteen patients.

Tiagabine:

Anxiety

*Crane DL. The selective GABA reuptake inhibitor tiagabine for the treatment of anxiety. Presented at the 22nd annual meeting of the Anxiety Disorders Association of America; March 21-24, 2002; Austin, TX. Case series of 10 severely ill patients with a variety of treatment-resistant anxiety disorders. All improved, treatment well-tolerated.

Generalized anxiety disorder

*Gruener D. Tiagabine as an augmenting agent for the treatment of anxiety. Presented at the 22nd annual meeting of the Anxiety Disorders Association of America; March 21-24, 2002; Austin, TX. Case series of 5 patients with treatment-resistant generalized anxiety disorder and a comorbid condition.

*Papp LA et al. Tiagabine treatment of generalized anxiety disorder (poster). 156th Annual Meeting of the American Psychiatric Association; 2003 May 17-22; San Francisco. Open-label series of 25 patients.

*Van Ameringen M et al. A randomized, double-blind, placebo-controlled study of tiagabine in patients with generalized anxiety disorder (poster). 24th Collegium Internationale Neuro-Psychopharmacologicum (CINP) Congress; 2004 Jun 20-24; Paris. Double-blind, placebo-controlled study of 272 patients.

Panic disorder

*Gruener D. Tiagabine as an augmenting agent for the treatment of anxiety. Presented at the 22nd annual meeting of the Anxiety Disorders Association of America; March 21-24, 2002; Austin, TX. Case series of 5 patients with treatment-resistant panic disorder, some with comorbid conditions.

*Zwanger et al. Tiagabine improves panic and agoraphobic in panic disorder patients (letter). J Clin Psychiatry 2001;62:656-657. Case series of 4 patients.

Social anxiety disorder

*Papp LA et al. Tiagabine for the treatment of social anxiety disorder (abstract). 157th Annual Meeting of the American Psychiatric Association; 2004 May 1-6; New York. Open label case series of 51 patients.

*Kinrys G et al. Adjunctive tiagabine for treatment refractory social anxiety disorder (poster). 157th Annual Meeting of the American Psychiatric Association; 2004 May 1-6; New York. Retrospective series of 14 patients.

Posttraumatic stress disorder

*Lara ME. Tiagabine as an augmentation of antidepressant treatment of post-traumatic stress disorder. Presented at the 22nd annual meeting of the Anxiety Disorders

Association of America; March 21-24, 2002; Austin, TX. Open label case series of 6 women with treatment-resistant PTSD.

*Davidson JR et al. Multicenter, double-blind comparison of sertraline and placebo in the treatment of posttraumatic stress disorder. Arch Gen Psychiatry 2001 May;58(5):485-92. Open label case series of 26 patients on tiagabine.

Levetiracetam:

Generalized anxiety disorder

*Pollack M. Levetiracetam (Keppra) for anxiety. Curbside Consultant 2002; 1(4):4. Case report of 1 patient.

Social anxiety disorder

Simon NM et al. An open-label study of levetiracetam for the treatment of social anxiety disorder. J Clin Psychiatry 2004;65:1219-1222. Open label case series of 20 patients. See study analysis on MAA form. Type III

The “*” articles are ones I have not seen first hand.

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